

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

PRODUCT NAME : RISOGRAPH CR INK < See separate section >
PRODUCT CODE : < See separate section >

1.2. Relevant identified uses of the substance or mixture and uses advised against

RELEVANT IDENTIFIED USES: INK for Digital Duplicator (CR Series)

1.3. Details of the supplier of the safety data sheet

MANUFACTURER NAME: RISOH KAGAKU CORPORATION
5-34-7 Shiba, Minato-ku, Tokyo, 108-8385, JAPAN
TEL: 81 (3) 5441-6611

SUPPLIER: RISOH KAGAKU CORPORATION LONDON OFFICE
610 Centennial Park, Centennial Avenue, Elstree, Herts, WD6 3TJ U.K
TEL: 44 (20) 8236-5800

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture**

CLASSIFICATION ACCORDING TO REGULATION (EC) NO 1272/2008:
Not classified.

2.2. Label elements

LABELLING ACCORDING TO REGULATION (EC) NO 1272/2008:

HAZARD PICTOGRAMS: Not required
SIGNAL WORD: Not required.
HAZARD STATEMENTS: Not required
PRECAUTIONARY STATEMENTS: Not required

2.3. Other hazards

RESULT OF PBT AND VPVB ASSESSMENT: Not applicable

SECTION 3: Composition/information on ingredients**3.2. Mixtures**

CHEMICAL CHARACTERIZATION: Water-in-Oil-type emulsion
INGREDIENTS: < See separate section >

SECTION 4: First aid measures**4.1. Description of first aid measures**

EYE: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

SKIN: After contact with skin, wash immediately with plenty of water using a mild soap.

INHALATION: If you feel unwell, move from the contamination immediately to fresh air and seek medical advice.

INGESTION: If swallowed, do not induce vomiting and seek medical advice.

4.2. Most important symptoms and effects, both acute and delayed

No further relevant information available.

4.3. Indication of any immediate medical attention and special treatment needed

No further relevant information available.

SECTION 5: Fire-fighting measures

- 5.1. Extinguishing media: Water, CO₂, foam, dry chemical powder, dry sand
- 5.2. Special hazards arising from the substance or mixture:
May produce toxic fumes of CO, CO₂, NO_x, SO_x
- 5.3. Advice for fire-fighters: This ink does not act as a source of ignition, but might burn if exposed to a fire.

SECTION 6: Accidental release measures

- 6.1. Personal precautions, protective equipment and emergency procedures:
Ventilate the area until material is completely picked up.
- 6.2. Environmental precautions:
Do not empty into the drains.
- 6.3. Methods and material for containment and cleaning up:
Shovel up, then wipe up with cloth or paper.

SECTION 7: Handling and storage

- 7.1. Precautions for safe handling:
Use only in the well-ventilated areas.
Avoid contact with skin. Use only with cartridge.
- 7.2. Conditions for safe storage, including any incompatibilities:
Store at 5 - 35 °C and protect from sunlight.
Keep the ink out of reach of children.
Only original cartridge.

SECTION 8: Exposure controls/personal protection

- 8.1. Control parameters: < See separate section >
- 8.2. Exposure controls:
- APPROPRIATE ENGINEERING CONTROLS:
Good general ventilation should be sufficient for most conditions.
- PERSONAL PROTECTIVE EQUIPMENT:
- | | |
|----------------------------|---|
| RESPIRATORY PROTECTION : | Not normally required |
| HAND PROTECTION: | Recommend the use of gloves in case of contact with skin. |
| EYE PROTECTION: | Not normally required |
| SKIN AND BODY PROTECTION : | Not normally required |

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties:**

PHYSICAL STATE:	Paste
ODOUR:	Slight petroleum odour
PH:	Not applicable
BOILING POINT:	> 100 °C
MELTING POINT:	< 0 °C
FLASH POINT:	None (Closed Cup)
AUTOIGNITION TEMPERATURE:	> 400 °C
EXPLOSION PROPERTIES:	Not applicable
OXIDISING PROPERTIES:	Not applicable
DENSITY:	1.00 - 1.12
WATER SOLUBILITY:	Negligible

SECTION 10: Stability and reactivity

- 10.1. Reactivity: No data available
- 10.2. Chemical stability: Stable under normal storage and handling conditions.
- 10.3. Possibility of hazardous reactions:
No data available
- 10.4. Conditions to avoid: Avoid exposure to high temperatures.
- 10.5. Incompatible materials: Strong oxidising agents
- 10.6. Hazardous decomposition products:
None

SECTION 11: Toxicological information**11.1. Information on toxicological effects**

- ACUTE ORAL TOXICITY: LD50 > 2000mg/kg (rat)
- ACUTE EYE IRRITATION: May cause slight irritation.
- ACUTE SKIN IRRITATION: May cause slight irritation.
- MUTAGENICITY: Negative in the Ames test
- CARCINOGENICITY: Carbon black is listed as Class 2B (Possible human carcinogen) by IARC. (However, IARC Monograph 93 also indicates "exposure to carbon black does not occur during the use of products in which carbon black is bound to other materials, such as rubber, printing ink or paint.")
Although petroleum solvent is listed in AnnexVI of Regulation (EC) No 1272/2008, it is justified by Note L not to classify it as carcinogens because it contains less than 3% DMSO extract.
None of the other ingredients in this product are listed by IARC, NTP, MAK, OSHA or ACGIH as a carcinogen. None of the other ingredients have been classified as carcinogens according to EU, IARC, MAK, NTP or OSHA.

**These information are based on toxicity data for similar materials and ingredients.*

SECTION 12: Ecological information

- 12.1. Toxicity:
FISH TOXICITY: Oryzias latipes LC50-96h > 100mg/l
- 12.2. Persistence and degradability:
No information available.
- 12.3. Bioaccumulative potential:
No information available.
- 12.4. Mobility in soil: No information available.
- 12.5. Results of PBT and vPvB assessment:
This product contains no substance considered to PBT and vPvB criteria.
- 12.6. Other adverse effects: No information available.

** This information is based on toxicity data for similar materials and ingredients.*

SECTION 13: Disposal considerations	
13.1. Waste treatment methods:	Burn in an adequate incinerator or bury in landfill in accordance with all applicable regulations. Any disposal practice must be in compliance with all EU and Member State (both federal and state) laws. Ink Cartridge(bottle) material is plastic(polypropylene/polyethylene).
SECTION 14: Transport information	
14.1. UN number:	Not applicable
14.2. UN proper shipping name:	Not applicable
14.3. Transport hazard class(es):	Not applicable
14.4. Packing group:	Not applicable
14.5. Environmental hazards:	Not applicable
14.6. Special precautions for user:	Not applicable
14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:	Not applicable
SECTION 15: Regulatory information	
15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture:	Disodium tetraborate is listed on the Candidate list for Authorization under REACH.
15.2. Chemical Safety Assessment:	No chemical safety assessment has been carried out.
SECTION 16: Other information	
Full text of classifications:	Asp.Tox.1 - Aspiration hazard, Category 1 Repr.1B – Reproductive toxicity Hazard, Category 1B
Full text of H-Statements	H304 - May be fatal if swallowed and enters airways. H360 - May damage fertility or the unborn child.

The information herein is given in good faith, but no warranty, express or imply, is made.
Please consult RISO KAGAKU CORPORATION LONDON OFFICE for further information.

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

PRODUCT NAME (ITEM CODE): RISOGRAPH CR INK / E BLACK (S-2487E)

SECTION 3: Composition/information on ingredients

3.2. Mixtures

INGREDIENTS:

	CAS No.	EINECS No.	Classification EC 1272/2008	wt%
Petroleum solvent	64742-52-5	278-012-2	Not classified.	<15
	64742-53-6			
	64742-55-8			
	64742-47-8	265-149-8	Asp.Tox.1; H304	< 5
Glycerol	56-81-5	200-289-5	Not classified.	< 10
Carbon black (pigment)	1333-86-4	215-609-9	Not classified.	< 10
Disodium tetraborate, anhydrous	1303-96-4	215-540-4	Repr.1B; H360	< 0.3
Alkyd resin	Trade secret	Not applicable	Not classified.	Trade secret
Water	7732-18-5	231-791-2	Not classified.	Trade secret

SECTION 8: Exposure controls/personal protection

8.1. Control parameters:

EXPOSURE GUIDELINES:

	CAS No.	ACGIH TWA
Petroleum solvent	64742-52-5	5 mg/m ³ *
	64742-53-6	
	64742-55-8	
Glycerol	56-81-5	10 mg/m ³
Carbon black (pigment)	1333-86-4	3.5 mg/m ³
Disodium tetraborate, anhydrous	1303-96-4	2mg/m ³

*1 : as mineral oil mists

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

PRODUCT NAME (ITEM CODE):
 RISOGRAPH CR INK RED (S-2489E)
 RISOGRAPH CR INK BLUE (S-2490E)
 RISOGRAPH CR INK GREEN (S-2491E)
 RISOGRAPH CR INK YELLOW (S-2493E)
 RISOGRAPH CR INK BRIGHT RED (S-2494E)

SECTION 3: Composition/information on ingredients

3.2. Mixtures

INGREDIENTS:

	CAS No.	EINECS No.	Classification EC 1272/2008	wt%
Soybean oil	8001-22-7	232-274-4	Not classified.	< 6
Petroleum solvent	64742-46-7	278-012-2	Not classified.	< 5
	64742-47-8	265-149-8	Asp.Tox.1; H304	< 10
Glycerol	56-81-5	200-289-5	Not classified.	< 10
Organic pigment(s)	Trade secret	Trade secret	Not classified.	Trade secret
Disodium tetraborate, anhydrous	1303-96-4	215-540-4	Repr.1B; H360	< 0.3
Alkyd resin	Trade secret	Not applicable	Not classified.	Trade secret
Water	7732-18-5	231-791-2	Not classified.	Trade secret

SECTION 8: Exposure controls/personal protection

8.1. Control parameters:

EXPOSURE GUIDELINES:

	CAS No.	ACGIH TLV
Petroleum solvent	64742-46-7	5 mg/m ³ *1
Glycerol	56-81-5	10 mg/m ³
Disodium tetraborate, anhydrous	1303-96-4	2mg/m ³

*1 : as mineral oil mists